

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-57. (Canceled)

58. (Original) A fuel cell system for providing power to a load, comprising:

a voltage bus;

a first fuel cell stack having a number of fuel cells electrically couplable across the voltage bus;

a first battery having a number of battery cells electrically couplable in parallel across the first fuel cell stack on the voltage bus;

a first reactant delivery system for delivering reactant to the fuel cells of the first fuel cell stack, the first reactant delivery system including at least a first control element adjustable to control a partial pressure in a flow of a reactant to at least some of the fuel cells of the first fuel cell stack;

a first control circuit coupled to receive signals corresponding to an operating condition of the first battery and configured to determine a deviation of the operating condition of the first battery from a desired operational condition of the first battery based on the received signals, the first control circuit further coupled to control the at least first control element based on the determined deviation;

a second fuel cell stack having a number of fuel cells electrically couplable across the voltage bus;

a second battery having a number of battery cells electrically couplable in parallel across the second fuel cell stack on the voltage bus;

a second reactant delivery system for delivering reactant to the fuel cells of the second fuel cell stack, the second reactant delivery system including at least a second control

element adjustable to control a partial pressure in a flow of a reactant to at least some of the fuel cells of the second fuel cell stack;

a second control circuit coupled to receive signals corresponding to an operating condition of the second battery and configured to determine a deviation of the operating condition of the second battery from a desired operational condition of the second battery based on the received signals, the second control circuit further coupled to control the at least second control element based on the determined deviation.

59. (Original) The fuel cell system of claim 58 wherein the second fuel cell stack and the second battery are electrical coupled in series with the first fuel cell stack and the first battery.

60. (Original) The fuel cell system of claim 58 wherein the second fuel cell stack and the second battery are electrical coupled in parallel with the first fuel cell stack and the first battery.

61. (Original) The fuel cell system of claim 58, further comprising:  
a third fuel cell stack having a number of fuel cells electrically couplable across the voltage bus;

a third battery having a number of battery cells electrically couplable in parallel across the third fuel cell stack on the voltage bus;

a third reactant delivery system for delivering reactant to the fuel cells of the third fuel cell stack, the third reactant delivery system including at least a third control element adjustable to control a partial pressure in a flow of a reactant to at least some of the fuel cells of the third fuel cell stack;

a third control circuit coupled to receive signals corresponding to an operating condition of the third battery and configured to determine a deviation of the operating condition of the third battery from a desired operational condition of the third battery based on the received signals, the third control circuit further coupled to control the at least third control element based on the determined deviation.

62. (Original) The fuel cell system of claim 58, further comprising:

a third fuel cell stack having a number of fuel cells electrically couplable across the voltage bus;

a third battery having a number of battery cells electrically couplable in parallel across the third fuel cell stack on the voltage bus;

a third reactant delivery system for delivering reactant to the fuel cells of the third fuel cell stack, the third reactant delivery system including at least a third control element adjustable to control a partial pressure in a flow of a reactant to at least some of the fuel cells of the third fuel cell stack;

a third control circuit coupled to receive signals corresponding to an operating condition of the third battery and configured to determine a deviation of the operating condition of the third battery from a desired operational condition of the third battery based on the received signals, the third control circuit further coupled to control the at least third control element based on the determined deviation, wherein the second fuel cell stack and the second battery are electrical coupled in series with the first fuel cell stack and the first battery, and with the third fuel cell stack and the third battery.

63. (Original) The fuel cell system of claim 58, further comprising:

a third fuel cell stack having a number of fuel cells electrically couplable across the voltage bus;

a third battery having a number of battery cells electrically couplable in parallel across the third fuel cell stack on the voltage bus;

a third reactant delivery system for delivering reactant to the fuel cells of the third fuel cell stack, the third reactant delivery system including at least a third control element adjustable to control a partial pressure in a flow of a reactant to at least some of the fuel cells of the third fuel cell stack;

a third control circuit coupled to receive signals corresponding to an operating condition of the third battery and configured to determine a deviation of the operating condition of the third battery from a desired operational condition of the third battery based on the received signals, the third control circuit further coupled to control the at least third control element based

on the determined deviation, wherein the second fuel cell stack and the second battery are electrical coupled in series with the first fuel cell stack and the first battery, and wherein the third fuel cell stack and the third battery are electrically coupled in parallel with the first and the second fuel cell stack and the first and the second battery.